



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/057,709	01/25/2002	Victor Kouznetsov	002.0233.01	9016

7590 04/10/2006
ZILKA-KOTAB, P.C.
P.O. BOX 721120
SAN JOSE, CA 95172-1120

EXAMINER

TAYLOR, NICHOLAS R

ART UNIT	PAPER NUMBER
----------	--------------

2141

DATE MAILED: 04/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/057,709

Applicant(s)

KOUZNETSOV ET AL.

Examiner

Nicholas R. Taylor

Art Unit

2141

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 January 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4,6-12,15,17-25,27-29,32-35,37-39 and 42-44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4,6-12,15,17-25,27-29,32-35,37-39 and 42-44 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>2/6/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The proposed amendments to the specification filed on January 12th, 2006 are approved.
2. Claims 1, 4, 6-12, 15, 17-25, 27-29, 32-35, 37-39 and 42-44 have been presented for examination and are rejected.

Response to Arguments

3. Applicant's arguments filed January 12th, 2006 have been fully considered but they are deemed not persuasive.
4. In the remarks, applicant argued in substance that:

(A) Prior art of Engel does not teach the installation of a configuration package as part of an initialization bootstrap operation. Engel instead teaches only a multi-cast query that tracks the responses of devices that are currently configured.

As to point (A), Engel specifically teaches configuring a network device that "may be undergoing an *initial configuration* or an update to its configuration" (Engel, paragraph 0018). As to the argument that the multi-cast query works with already configured devices, the Applicant's invention initially "broadcasts a 'ping' query message to all appliances and receives back from each a response indicating a

configuration state" (Specification, page 4, lines 8-14). In both Applicant's invention and Engel's teaching, an unconfigured device is capable of at least responding to this message to notify the central server that a configuration is requested.

(B) The prior art of Cohen fails to teach a library of applets, instead teaching an embedded virtual machine that "acts as a container for downloaded applications, such as applets, which extend the functionality of a device running local embedded firmware."

As to point (B), Cohen does teach the use of a virtual machine present on each receiving client system. However, the virtual machine is used only to execute the customized applets that are downloaded, i.e. it provides a framework to run downloaded application code (Cohen, paragraphs 0031-0033, particularly 0033). A central server contains a variety of applets that are available for each client to download and execute, with the help of the virtual machine (Cohen, paragraph 0041).

(C) The Examiner makes contradictory statements by stating that a device can send current configuration information and at the same time be unconfigured.

As to point (C), the Examiner would like to clarify that "current configuration information" refers to the configuration "status" of the device. While the device may respond with a current configuration, if the device has not yet been initialized it would respond with a message stating it is currently not configured. See Engel paragraph 0022 where the device responds that it is "capable of being configured."

5. Applicant's remaining arguments have been considered but are moot in view of the new grounds of rejection.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 4, 6, 9-12, 15, 17, and 20-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Engel et al. (US PGPub 2002/0198969) and O'Toole et al. (US Patent 6,345,294).

8. As per claims 1, 12, and 23, Engel teaches a method for providing Web browser-based remote network appliance configuration in a distributed computing environment (Engel, figure 4), comprising:

broadcasting a query message from an applet executing within a Web browser to one or more network appliances interconnected within a bounded network domain defined by a common network address space; (Engel, paragraph 0022)

processing a response message containing network settings received by the applet from at least one such network appliance responsive to the query message; and (Engel, paragraph 022)

generating and sending a configuration packet using the physical network address for each at least one such network appliance sending a response message and requiring configuration (Engel, paragraph 0031, wherein use of the physical address is part of IP and ethernet communication).

Although Engel teaches sending “an identifier and/or related information for the network device,” Engel doesn’t specifically teach including the physical network address in response to the query or

a list of the network appliances maintained by the status module for each at least one such network appliance sending a response message and not requiring configuration; and

a completion module receiving a status message from each at least one such network appliance requiring configuration responsive to receipt of the configuration packet;

wherein when the status message indicates an unsuccessful configuration, further comprising resending the configuration packet to the at least one such network appliance.

O’Toole teaches sending a physical network address (O’Toole, column 6, lines 29-38) where a list of network appliances are maintained enumerating the devices that are configured and unconfigured (O’Toole, column 7, lines 16-29 and figure 3, item 30) and resending failed configuration packets (O’Toole, column 11, line 62 to column 12, line 21, wherein a previously configured appliance that is currently unconfigured according to the status message is resent a configuration packet).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have combined Engel and O'Toole to provide the configuration system of O'Toole in the system of Engel, because doing so would avoid the major cost of owning and operating a network appliance on an ongoing basis by avoiding individualized appliance maintenance and configuration (O'Toole, column 3, lines 7-13).

9. As per claims 4, 15, and 23, Engel-O'Toole teaches the system further wherein the status message indicates a successful configuration, further comprising:

 sending a kickstart message to each at least one such network appliance to initiate an autonomous management session (O'Toole, column 24, lines 10-64, wherein the system initiates and begins management automatically after successfully configuring the network appliances).

10. As per claims 6, 17, and 23, Engel-O'Toole teaches the system further wherein the status message indicates an on-going configuration, further comprising:

 waiting for completion of configuration by the at least one such network appliance (O'Toole, column 14, line 31 to column 15, line 43).

11. As per claims 9, 20, and 23, Engel-O'Toole teaches the system further comprising:

sending at least one of the query message and the configuration packet from the applet responsive to instructions maintained in a message queue (Engel, paragraph 0031-0032).

12. As per claims 10, 21, and 23, Engel-O'Toole teaches the system further comprising:

storing into the configuration packet values comprising at least one of hostname, domain, internet protocol address, netmask, gateway, primary domain name server, and secondary domain name server (Engel, paragraph 0029).

13. As per claims 11, 22, and 23, Engel-Poger teaches the system further wherein the bounded network domain is compliant with the TCP/IP (Engel, paragraph 0023) and the configuration packet is compliant with the UDP (Engel, paragraph 0032, specifically the "multi-cast protocol").

14. Claims 7, 8, 18, 19, 23-25, 27-29, 32-35, 37-39, and 42-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Engel et al. (US PGPub 2002/0198969) and O'Toole et al. (US Patent 6,345,294), further in view of Cohen (US PGPub 2003/0023732).

15. As per claims 7, 18, and 23, Engel-O'Toole teaches the above, and further comprising:

installing the applet into the Web browser prior to broadcasting the query message (Engel, paragraph 0008, specifically sentences 1-3).

However, Engel-O'Toole fails to teach receiving the applet from an applet database storing a plurality of applets customized for execution within each such bounded network domain. Cohen teaches a centralized server storing an applet database (Cohen, paragraph 0032) with applets designed to modify the devices they are downloaded to (Cohen, paragraph 0041).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have combined Engel-O'Toole and Cohen to provide the configuration applet database of Cohen in the system of Engel-O'Toole, because doing so would enable updating the functionality of a broad range of devices from a central location (Cohen, paragraph 0010).

16. As per claims 8, 19, and 23, Engel-O'Toole-Cohen teaches the system further comprising:

receiving the applet in a secure session (Cohen, paragraph 0042).

17. As per claims 24, 34, and 44, Engel teaches a method for remotely configuring a network appliance deployed within a distributed computing environment, comprising:

sending a response message containing network settings from at least one network appliance responsive to a query message broadcast over a specified network

Art Unit: 2141

domain within which the at least one network appliance operates; (Engel, paragraph 0022)

generating a configuration package for the at least one network appliance and containing centrally managed network settings customized for the at least one network appliance; and (Engel, paragraph 0031-0032)

installing the configuration package on the at least one network appliance as part of an initialization bootstrap operation (Engel, paragraph 0032, wherein the settings initializes devices that are previously unconfigured).

However, Engel fails to teach a library of applets for one or more Web browser-based configuration clients operating within the specified network domain.

Cohen teaches a centralized server storing an applet database (Cohen, paragraph 0032) with applets designed to modify the devices they are downloaded to (Cohen, paragraph 0041).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have combined Engel and Cohen to provide the configuration applet database of Cohen in the system of Engel, because doing so would enable updating the functionality of a broad range of devices from a central location (Cohen, paragraph 0010).

Engel further fails to teach a completion module sending a message comprising one of success, failure and unconfigured following configuration package installation at each such network appliance; and

a status daemon initializing a secure management session following successful configuration package installation on at least one such network appliance.

O'Toole teaches sending a physical network address (O'Toole, column 6, lines 29-38) where a list of network appliances are maintained enumerating the devices that are configured and unconfigured (O'Toole, column 7, lines 16-29 and figure 3, item 30) and a secure management session following successful configurations (O'Toole, column 24, lines 10-64).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have combined Engel-Cohen and O'Toole to provide the configuration system of O'Toole in the system of Engel-Cohen, because doing so would avoid the major cost of owning and operating a network appliance on an ongoing basis by avoiding individualized appliance maintenance and configuration (O'Toole, column 3, lines 7-13).

18. As per claims 25, 35, and 44, Engel-O'Toole-Cohen teaches the system further comprising:

centrally managing a library of configurations containing network settings for each such network appliance operating with the specified network domain (Engel, paragraph 0034, specifically the configuration server).

19. As per claims 27, 37, and 44, Engel-O'Toole-Cohen teaches the system further comprising:

deploying one such applet from the library to each such configuration client using a secure session (Cohen, paragraph 0042).

20. As per claims 28, 38, and 44, Engel-O'Toole-Cohen teaches the system further comprising:

exporting a standardized user interface providing configuration controls for a heterogeneous set of the network appliances (Engel, paragraph 0019, specifically the web browser interface).

21. As per claims 29, 39, and 44, Engel-O'Toole-Cohen teaches the system further comprising:

including at least one of a timestamp and a unique seed value in each such configuration package (O'Toole, appendix A, see TIMESTAMP references in configuration packaging).

22. As per claims 32, 42, and 44, Engel-O'Toole-Cohen teaches the system further wherein at least one such network appliance performs one of electronic mail anti-virus scanning, content filtering, packet routing, and file, Web and print servicing (Engel, paragraph 0004).

Art Unit: 2141

23. As per claims 33, 43, and 44, Engel-O'Toole-Cohen teaches the system further wherein the distributed computing environment is TCP/IP-compliant (Engel, paragraph 0032).


Conclusion

24. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nicholas Taylor whose telephone number is (571) 272-3889. The examiner can normally be reached on Monday-Friday, 8:00am to 5:30pm, with alternating Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia can be reached on (571) 272-3880. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-3718.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nicholas Taylor
Examiner
Art Unit 2141



LE PHIE LUU
PRIMARY EXAMINER